

May 14, 2013

Office of the General Manager

Ms. Mary M. Letzkus
US EPA Region 3
Mail Code: MC 3WP13
1650 Arch Street
Philadelphia, PA 19103

Via Certified Mail # 7005 1820 0004 4518 9701 / Return Receipt Requested

Re: NPDES Permit Application for Permit No. DC 0000019 Washington Aqueduct

Dear Ms. Letzkus:

In accordance with 40 CFR Part 122.21 and Part II.D.9 of the permit dated November 20, 2008, we are submitting our completed application for renewal of the referenced permit. This application covers outfalls 002, 003, 004, 006, 007, 008 and 009; all covered under the existing permit.

As you know Washington Aqueduct is operating the Residuals Processing Facility and has fulfilled its obligations under the Federal Facility Compliance Agreement (Docket No. CWA-03-2003-0136DN). Currently, water treatment residuals from the Dalecarlia Water Treatment Plant sedimentation basins, the Georgetown sedimentation basins, and the forebay of the Dalecarlia Reservoir are collected, processed, dewatered and trucked for off-site disposal. Therefore, operation of the RPF has eliminated the return of water treatment residuals to the Potomac River from the sedimentation basins. If there were to be an operational need to make water treatment residuals discharges from outfalls 002, 003, or 004, that would be handled as an upset or bypass under the terms of the permit.

There will continue to be a discharge of ground water, through outfall 002, from a spring located beneath the Dalecarlia sedimentation basins and minor leakage from the Dalecarlia sedimentation basins (about 19.3 MG per year).

For the purpose of this application we have listed one potential bypass or upset in each basin over the five year period of the permit and have made those calculations as they would apply to outfalls 002, 003 and 004.

Outfall 006 takes water from the conduit that moves treated water from the Dalecarlia Reservoir to the Georgetown sedimentation basins. In order to periodically inspect the integrity of that conduit (which now includes the pipes that take pressurized

dredged sediment from the Georgetown basins back to the Residuals Processing Facility) it must be drained.

There are two ways to drain that conduit. One is to close the influent at the Dalecarlia Reservoir and close the Georgetown Conduit effluent that goes into the Georgetown sedimentation basins (sometimes referred to as the “Georgetown Reservoir”) and open the gate valve which is located midway between the Dalecarlia and Georgetown and have the contents of the conduit drain to the Potomac River. The other way that has often been used in the past is to take advantage of the draining of one of the two sedimentation basins at Georgetown and let the contents of the conduit flow into the empty basin after closing the influent at the Dalecarlia Reservoir. Since we will not be draining the Georgetown Sedimentation basins as part of our residuals management, that option will not be available in the future.

Therefore, we will need to use Outfall 006. Given normal ranges of settled water (raw water from the Dalecarlia Reservoir with coagulant aluminum sulfate added as it leaves the Dalecarlia Reservoir en route to the Georgetown basins), we are requesting a minor change in average monthly permit limit for total aluminum from 4.0 mg/L to 6.0 mg/L and retaining the maximum daily limit at 8.0 mg/L. The other discharge parameters in the current version of DC 0000019 can remain as they are. We anticipate the discharge frequency of once every three years for inspection purposes. In the case of a break in one of the pressurized lines carrying the residuals back to the treatment facility we would need to get to it very soon after the break occurred and we would determine if it could be done within the requested limits for Outfall 006 or whether we would need to coordinate with you and exercise the upset conditions or request a bypass. The volume is approximately 5 million gallons and would be discharged over one day.

As to this increase in the monthly aluminum limit, we are specifically requesting a waiver under the anti-backsliding provisions of 33 U.S.C. § 1342(o)(2)(A), and 40 CFR § 122.44(l)(2)(i)(A) because the substantial alteration to the operations of the Washington Aqueduct for the addition of the residuals treatment after the issuance of the current permit. Because this limit is a technical one, we do not believe the water quality restrictions of 33 U.S.C. § 1342(o)(3) or 40 CFR 122.44(l)(2)(ii) apply in this case.

Pollutants have been marked “believed present” and the intake column marked if the pollutants are present in our raw water analysis. Pollutants have been marked “believed present” and identified as a “treatment chemical” if they are a chemical added to the raw water. Pollutants have been marked “believed present” if they are detected in chemicals analysis.

If you believe it would be beneficial to meet in person to discuss this renewal application, we invite you to come to the Dalecarlia Water Treatment Plant, or we will come to Philadelphia to meet with you there.

If you have any questions please call me at 202-764-0031 or your staff can contact Mr. Shabir Choudhary at 202-764-2771.

Sincerely,

Thomas P. Jacobus
General Manager